

FIGURE 1

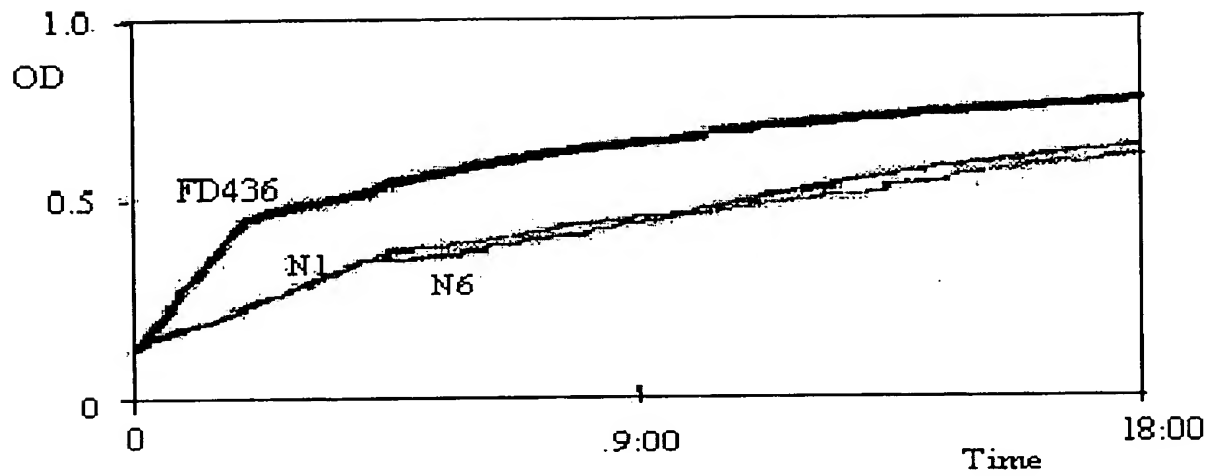


FIGURE 2

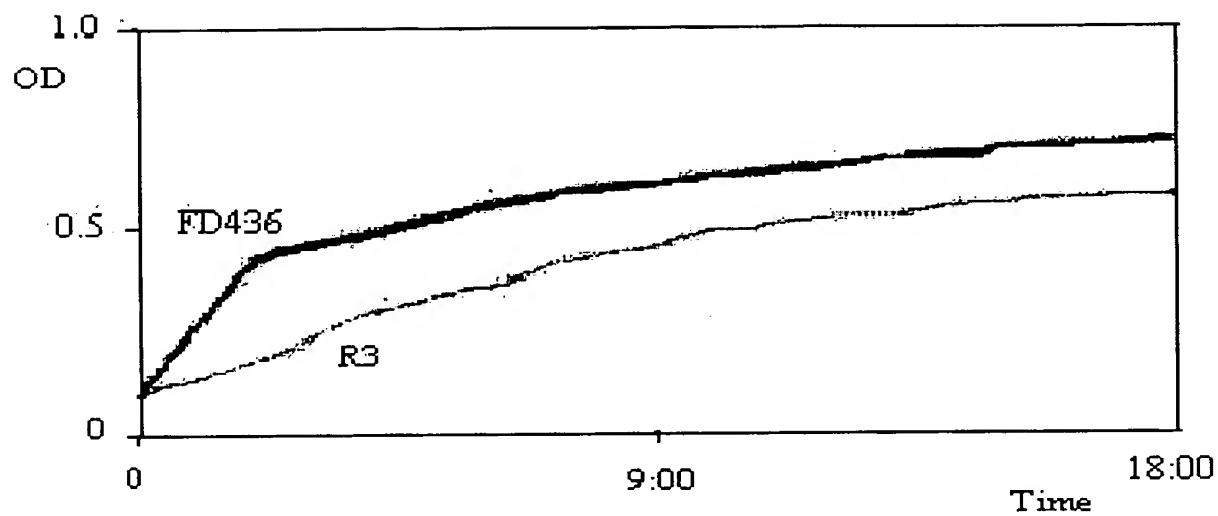


FIGURE 3

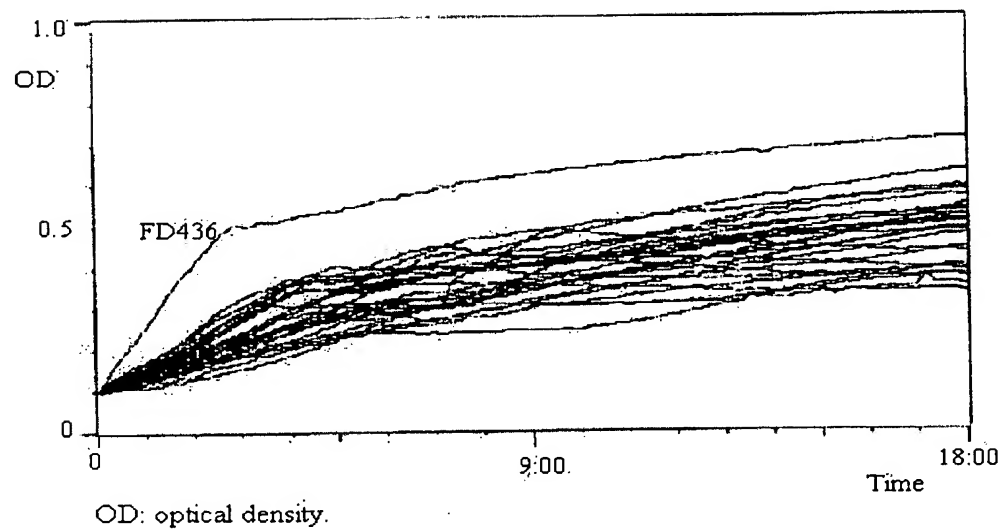
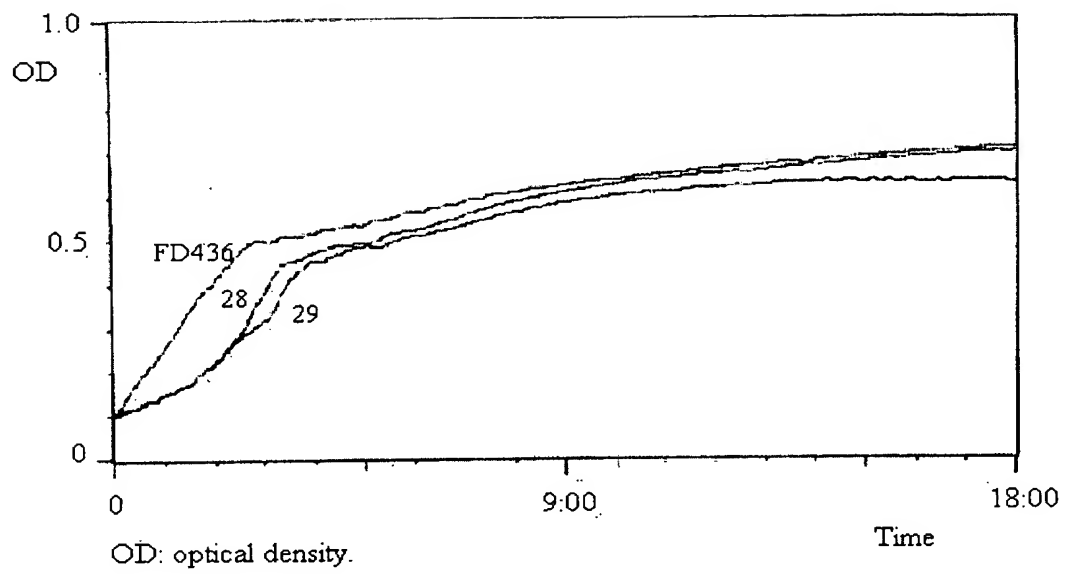


FIGURE 4

**FIGURE 5**

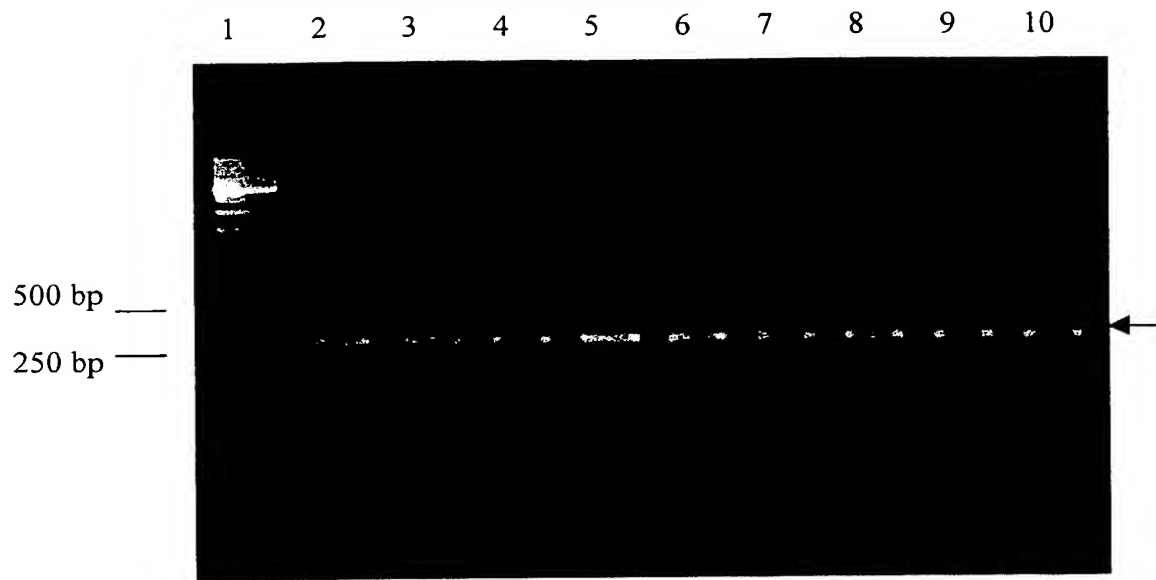
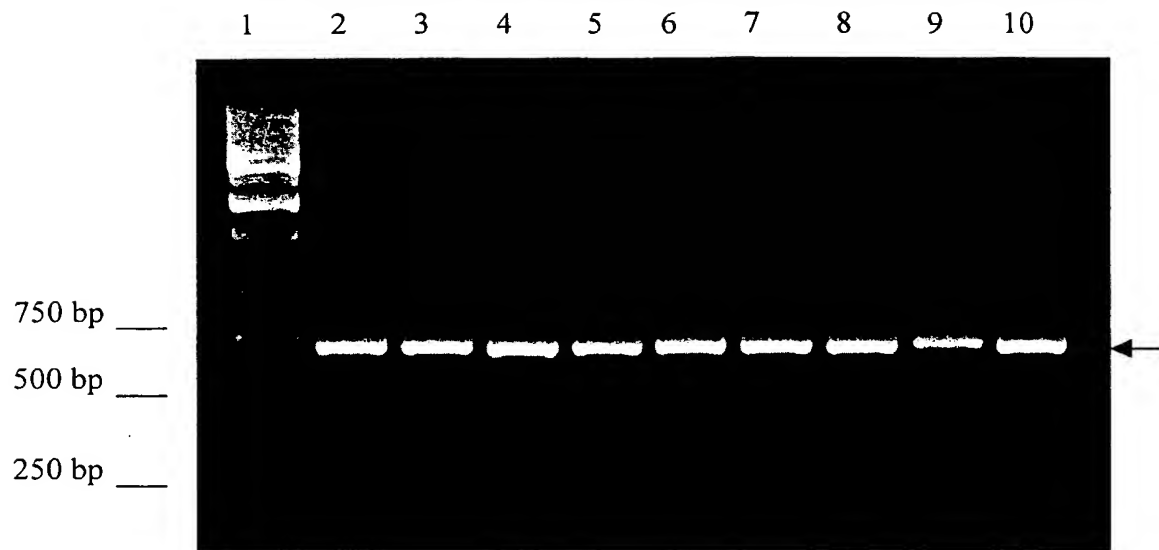


FIGURE 6

**FIGURE 7**

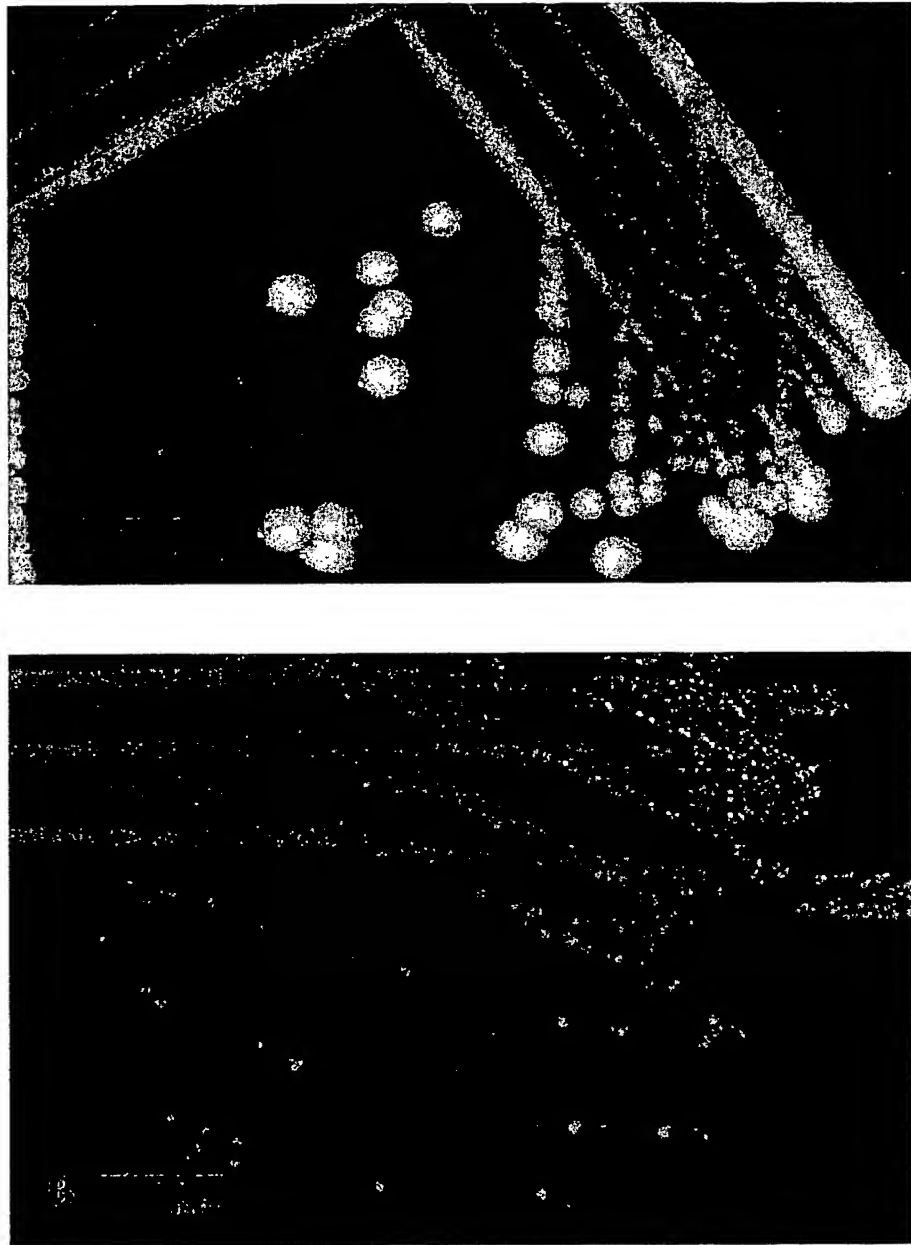
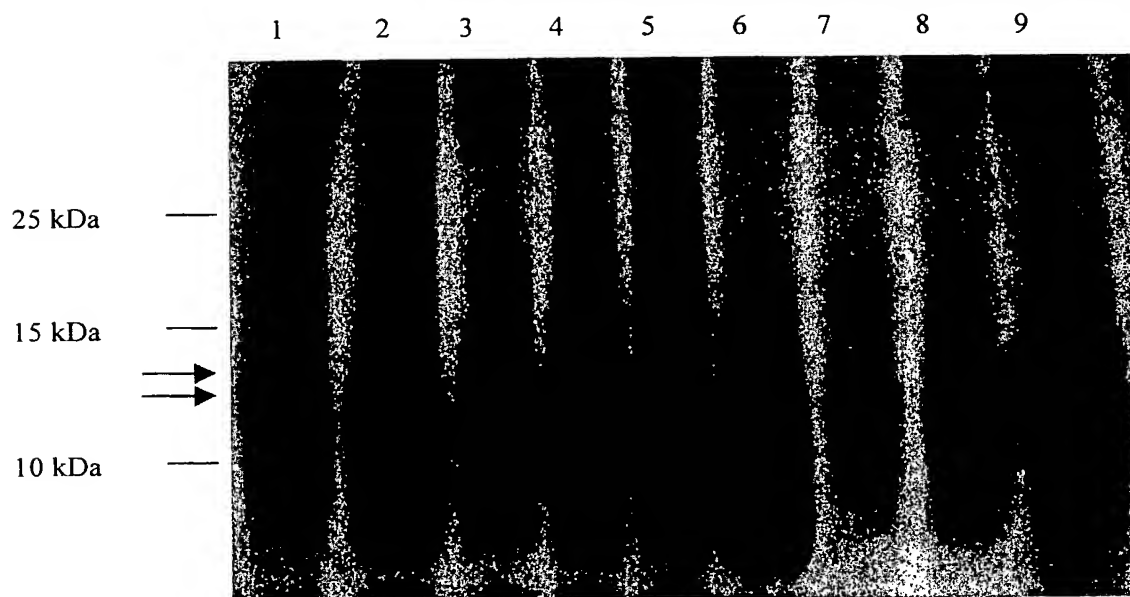
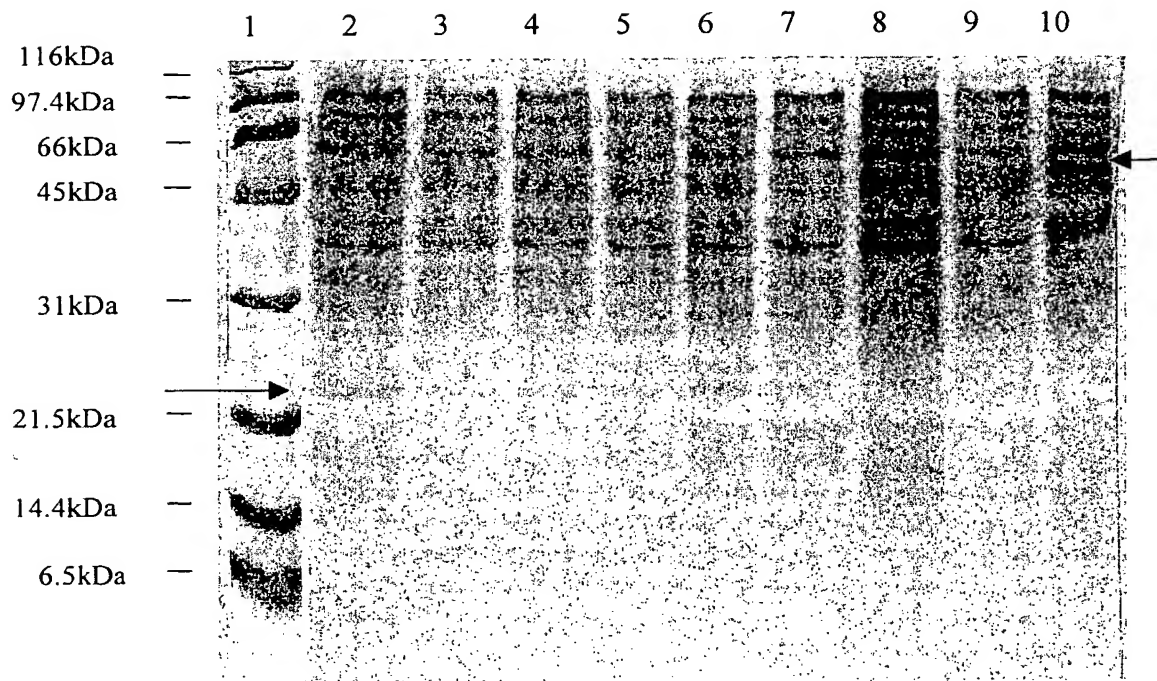


FIGURE 8

**FIGURE 9**

**FIGURE 10**

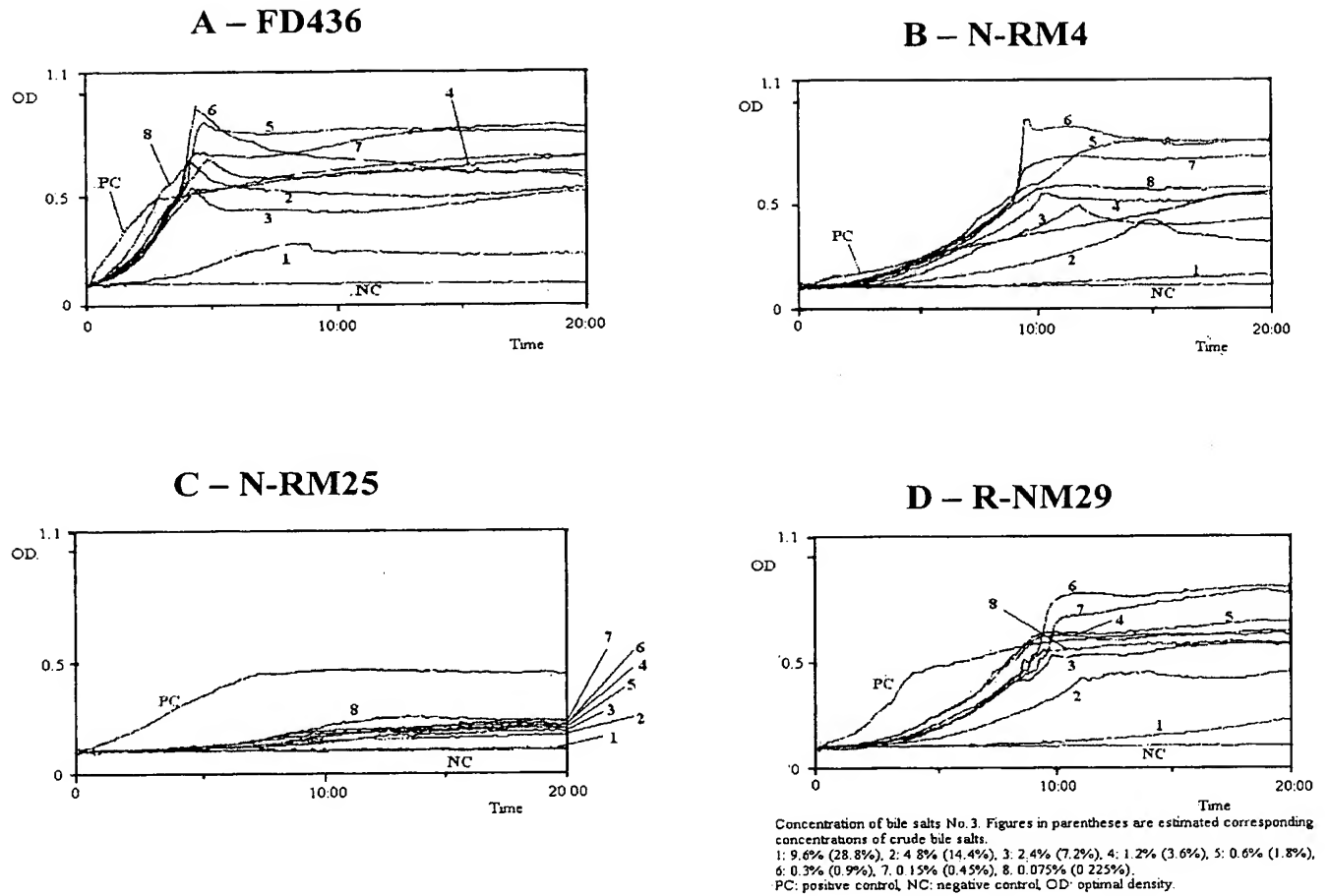
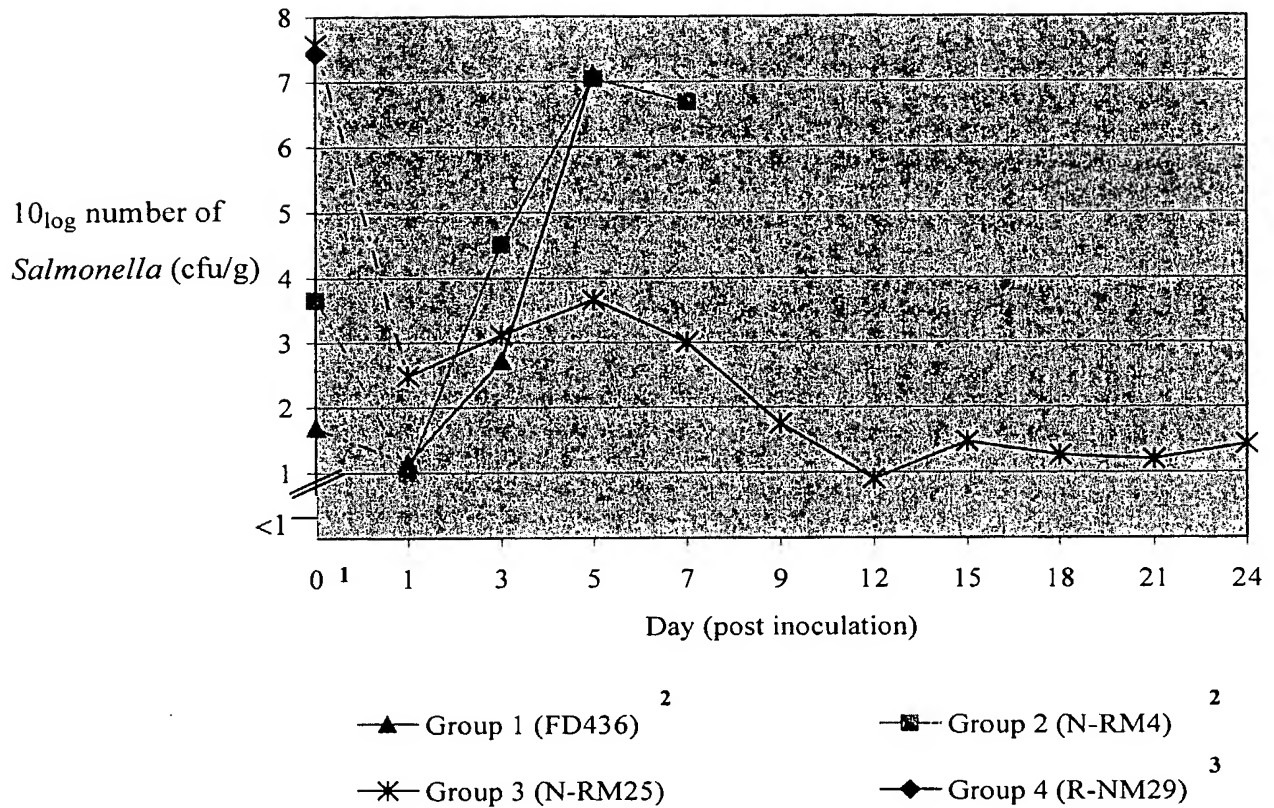


FIGURE 11



¹: The numbers of *Salmonella* on Day 0 indicate the infectious doses of FD436, N-RM4, N-RM25 and R-NM29 inoculated to mice in each group. They do not represent the number of bacteria in the liver plus spleen.

²: All mice in Groups 1 and 2 were euthanased or died by Day 6 and Day 8 post-inoculation, respectively.

³: No *Salmonella* were isolated from the livers and spleens of mice in Group 4 throughout the nine-day observation period.

FIGURE 12

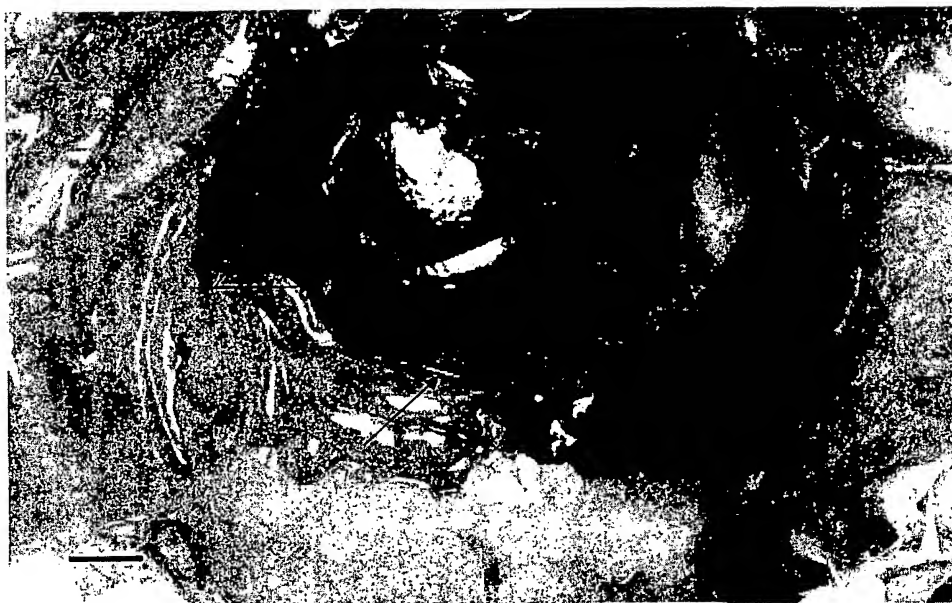


FIGURE 13



FIGURE 14

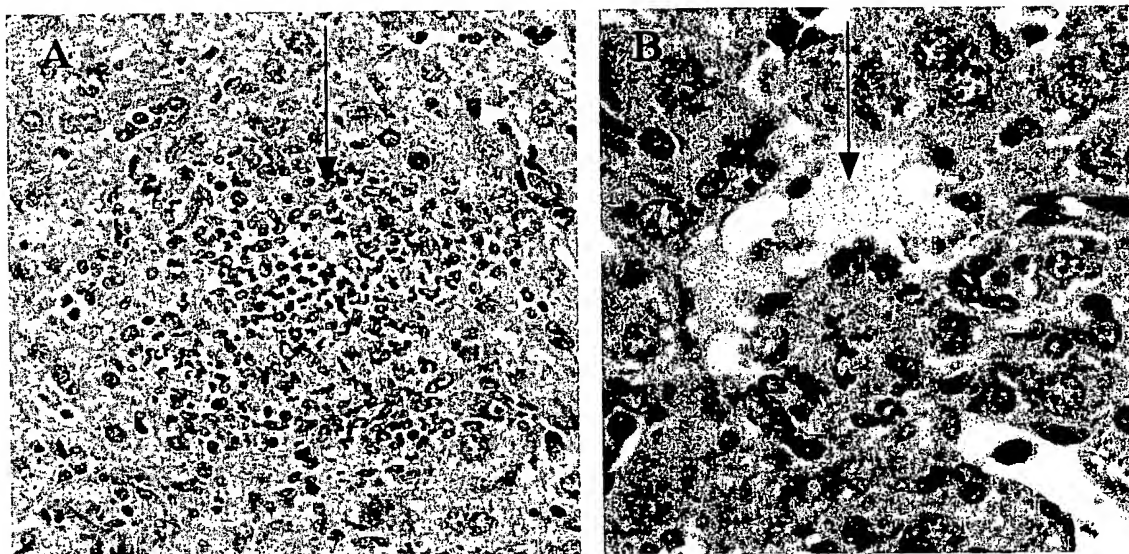


FIGURE 15

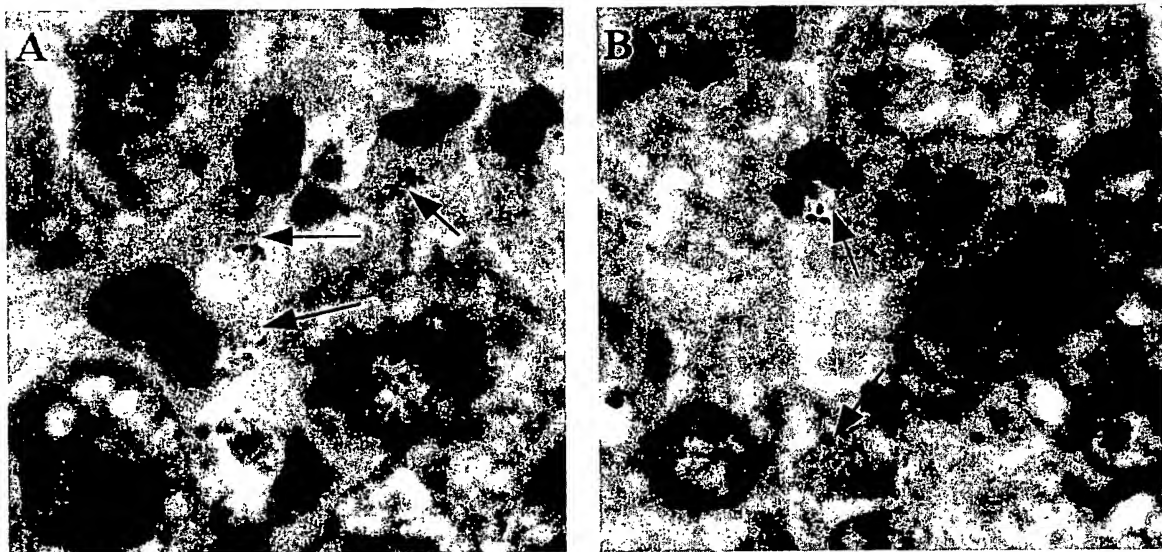


FIGURE 16

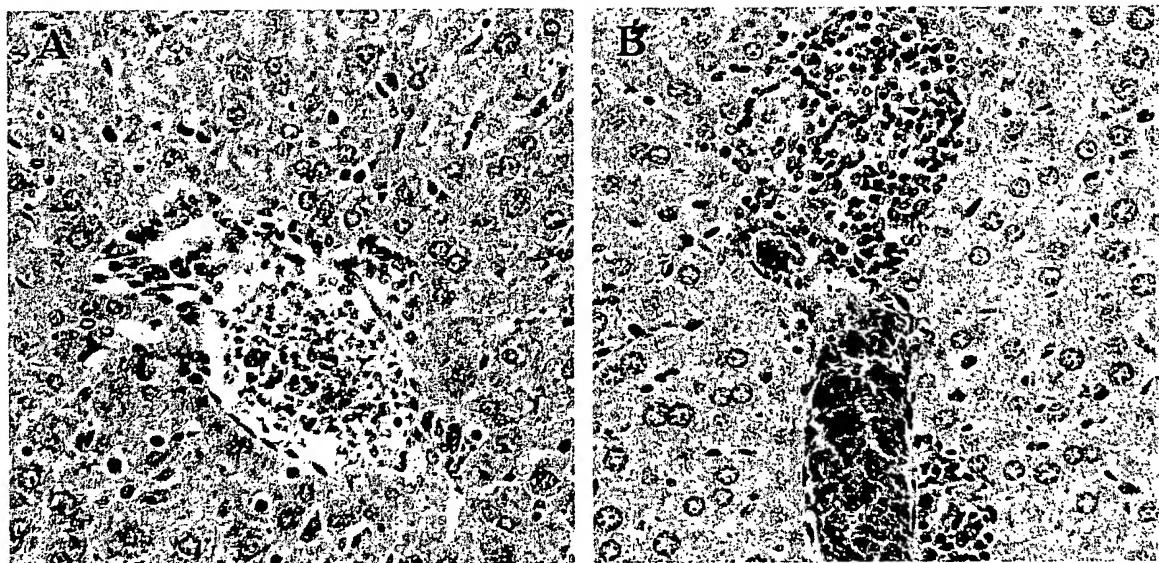


FIGURE 17

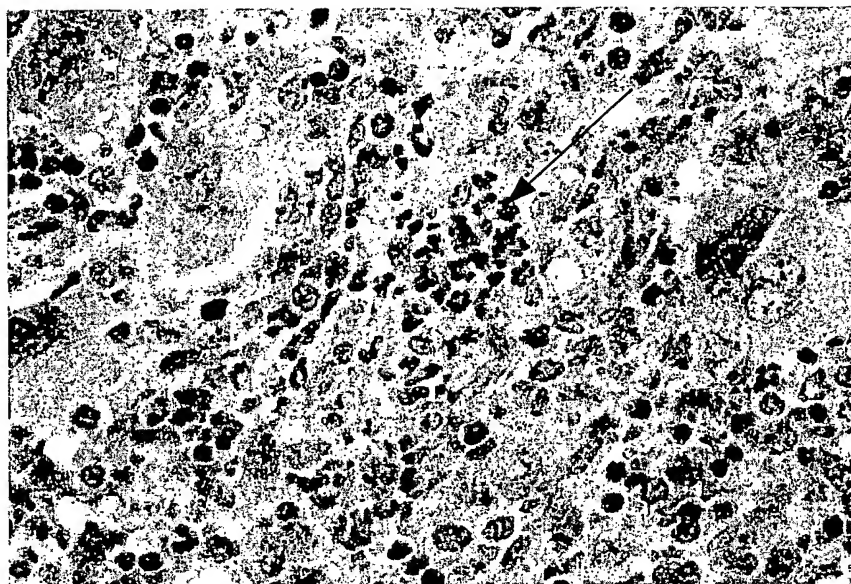


FIGURE 18

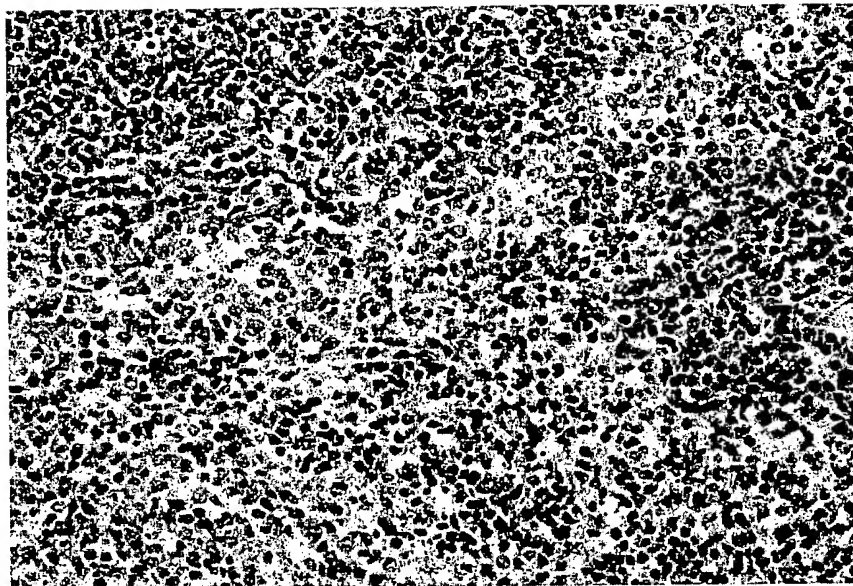


FIGURE 19

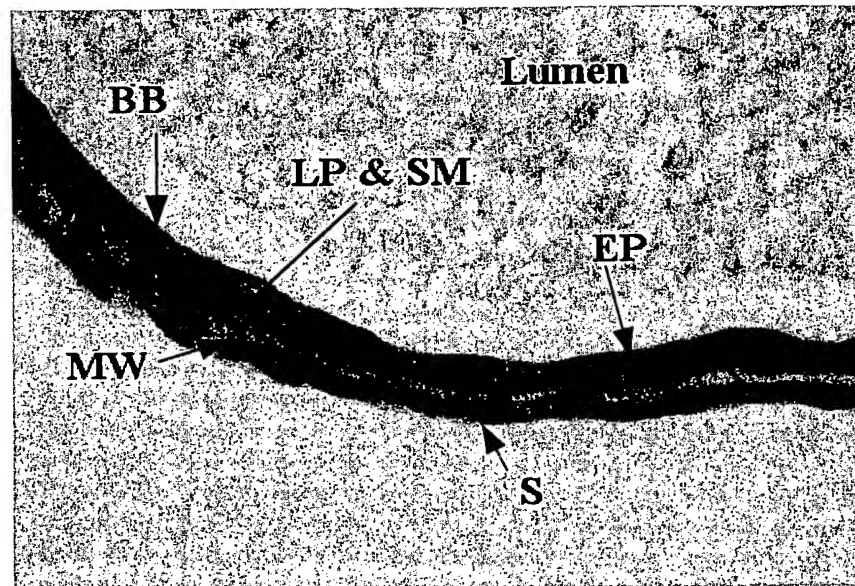


FIGURE 20

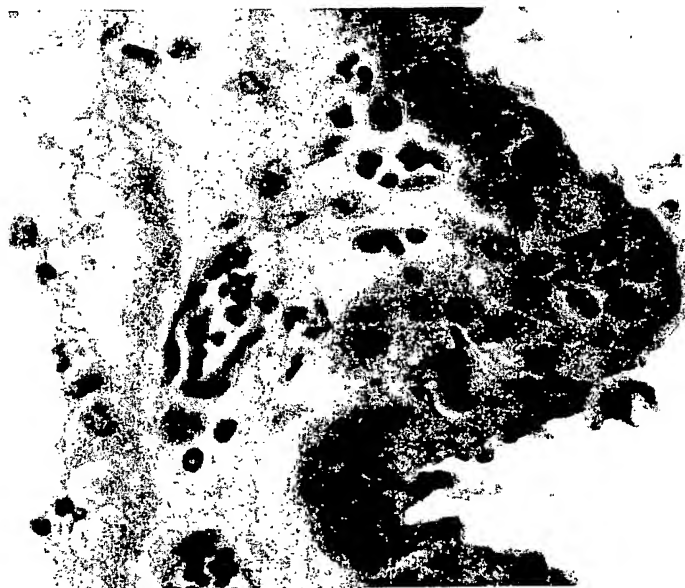


FIGURE 21

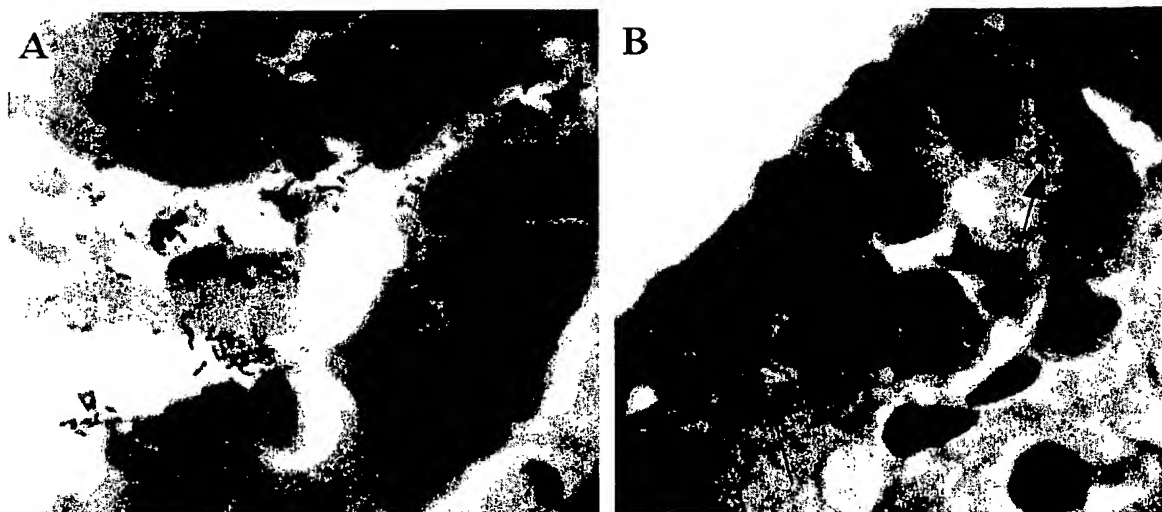


FIGURE 22

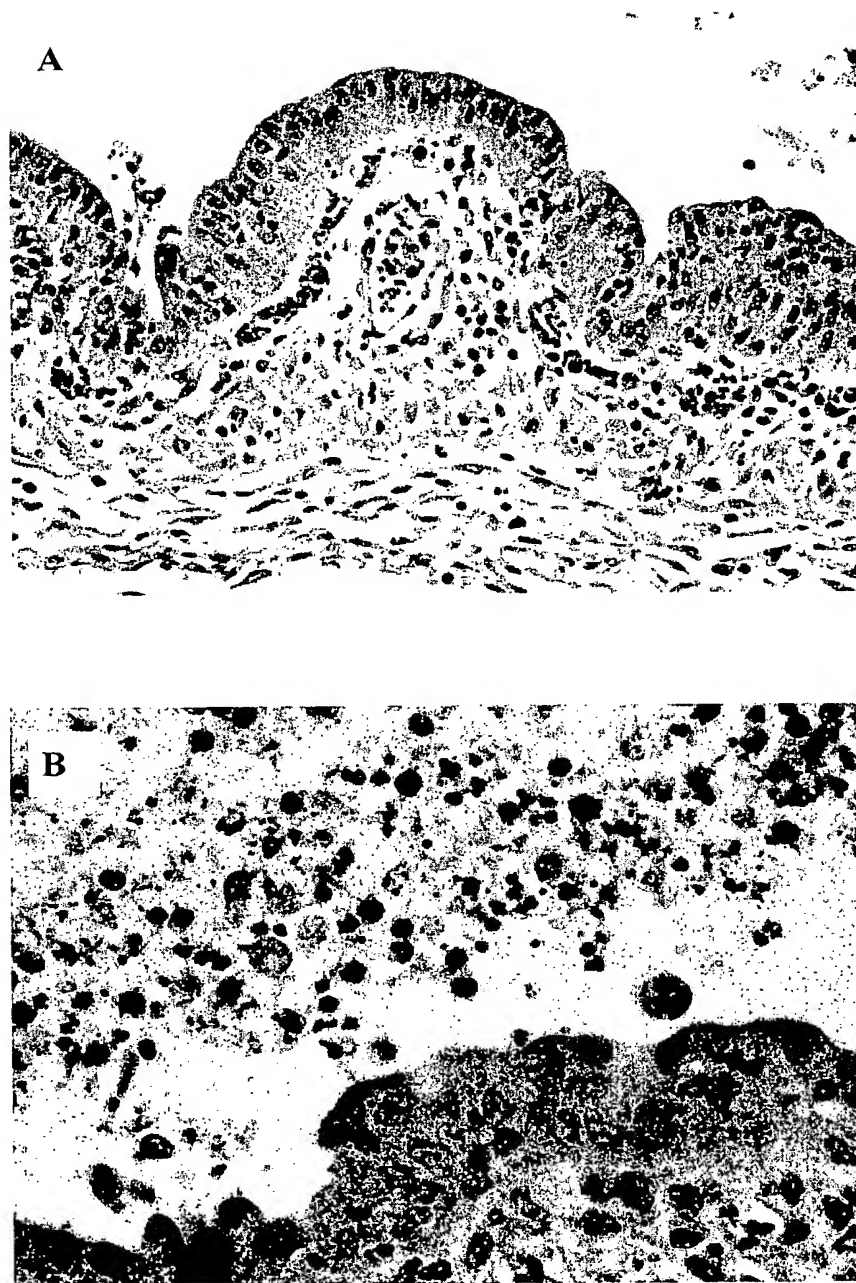


FIGURE 23

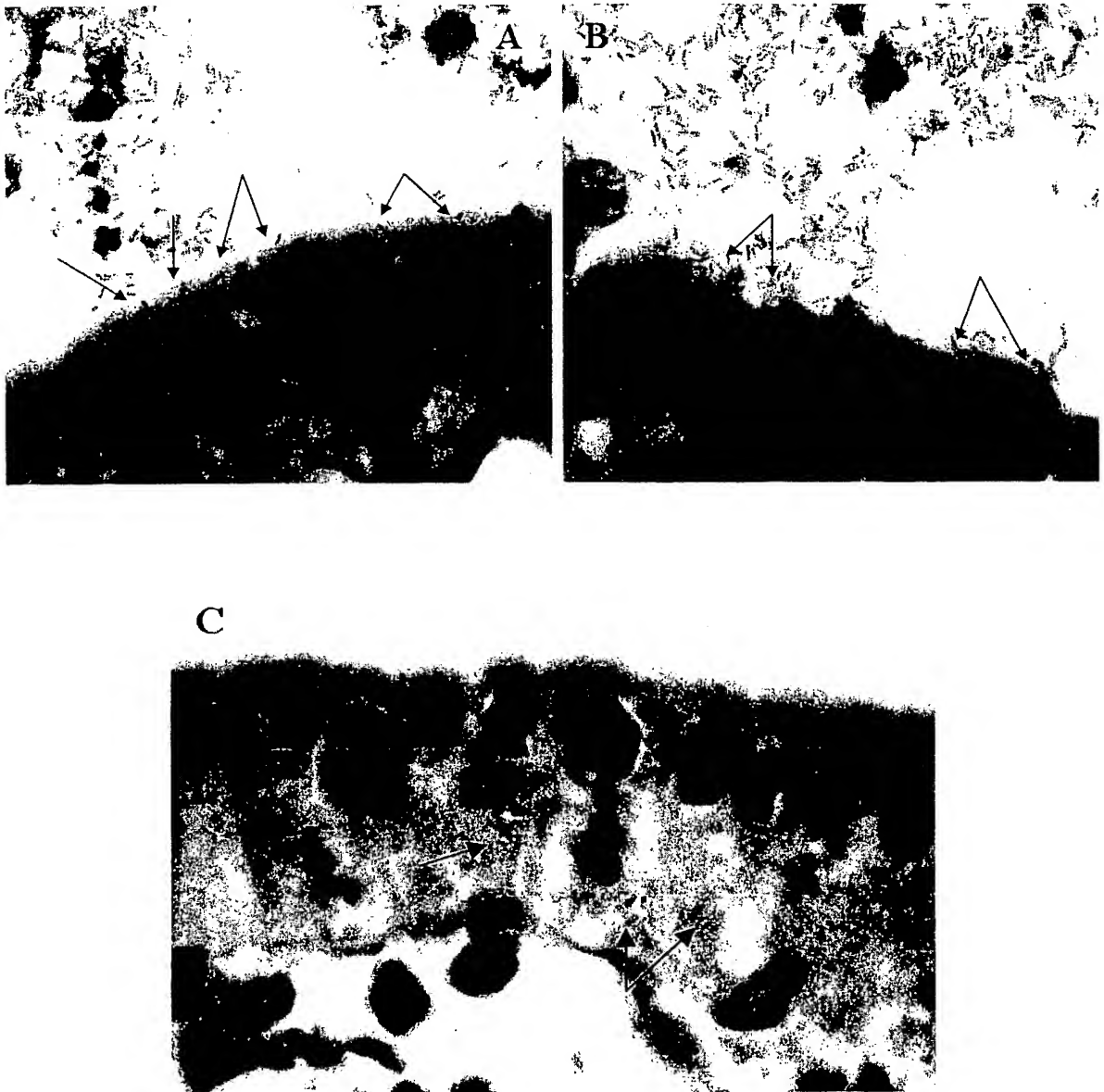


FIGURE 24

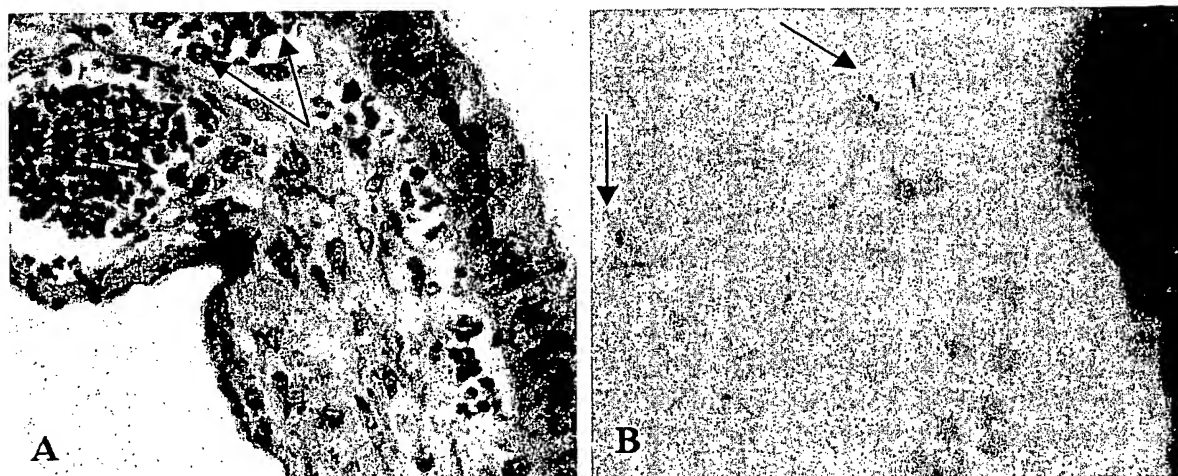
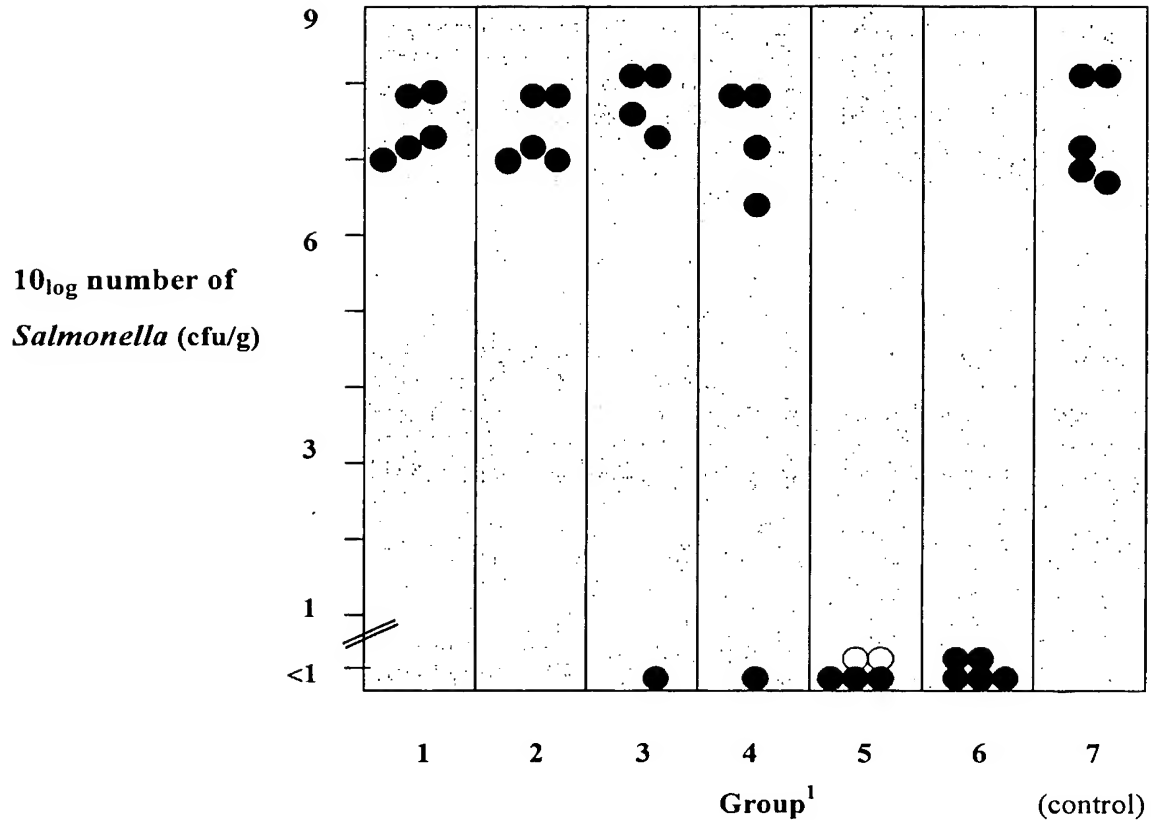


FIGURE 25



FIGURE 26



¹: Vaccination: Group 1 – single low-dose, 2 – double low-dose, 3 – single medium-dose, 4 – double medium-dose, 5 – single high-dose, 6 – double high-dose.

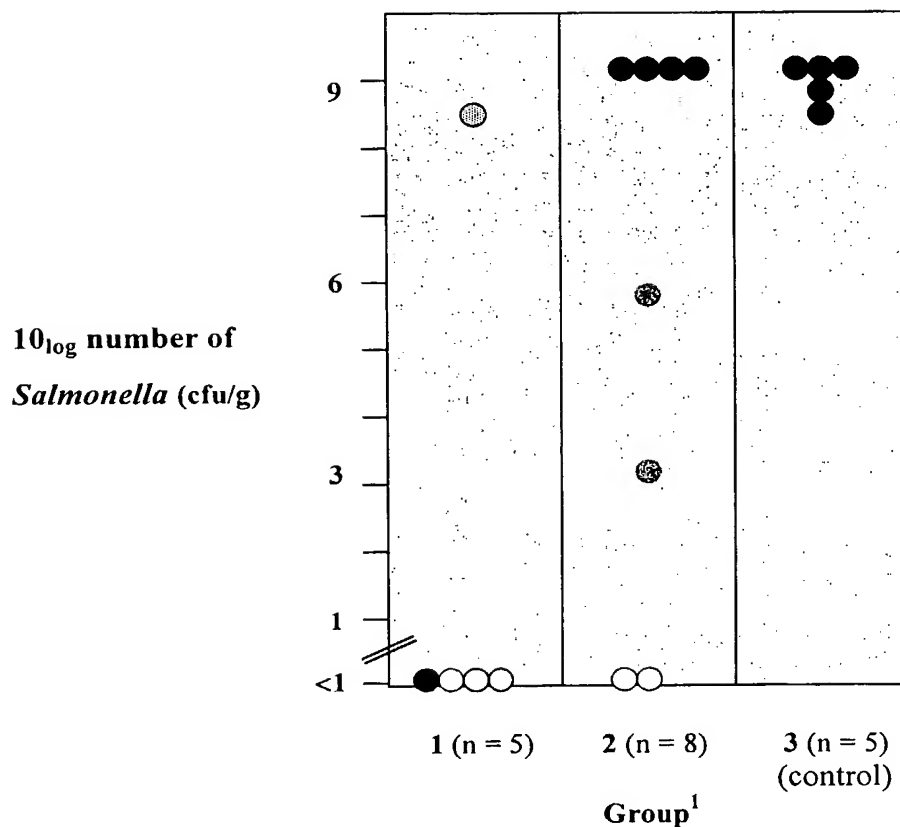
Refer to Table 8.2 for detailed vaccination and challenge infection information.

● : Mice euthanased due to clinical signs of salmonellosis and from which the challenge strain was isolated using quantitative culture.

○ : Mice that survived challenge infection and from which the challenge strain was isolated by enrichment only.

● : Mice that survived challenge infection and from which *Salmonella* was not isolated.

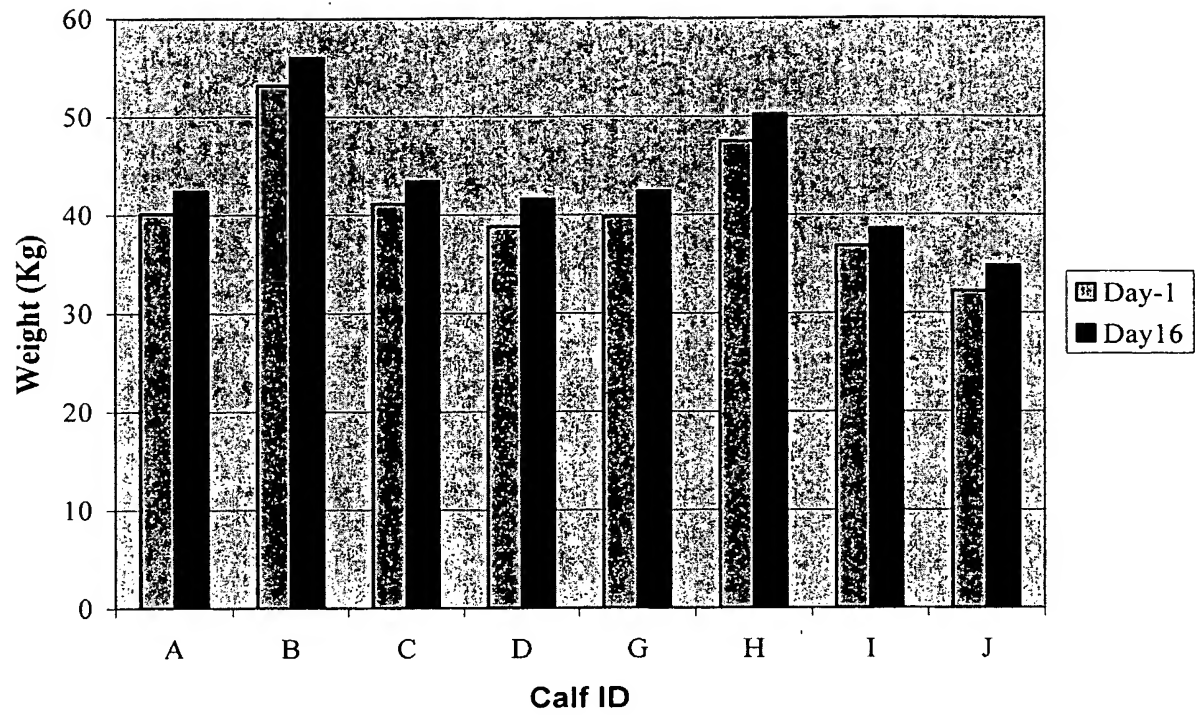
FIGURE 27



¹: Vaccination: Group 1 - N-RM4, 2 - R-NM29. Refer to Table 8.3 for detailed vaccination and challenge infection information. n: number of tested mice.

- : Mice that died before challenge infection and from which the corresponding vaccine strains were isolated using quantitative culture.
- : Mice that survived challenge infection and from which the corresponding vaccine strains were isolated by enrichment only.
- : Mice euthanased due to critical illness and from which the challenge strain was isolated using quantitative culture.
- : Mice that survived challenge infection and from which the challenge strain was isolated using quantitative culture.
- : Mice that survived challenge infection and from which the challenge strain was isolated by enrichment only.
- : Mice that survived challenge infection and from which *Salmonella* was not isolated.

FIGURE 28

**FIGURE 29**

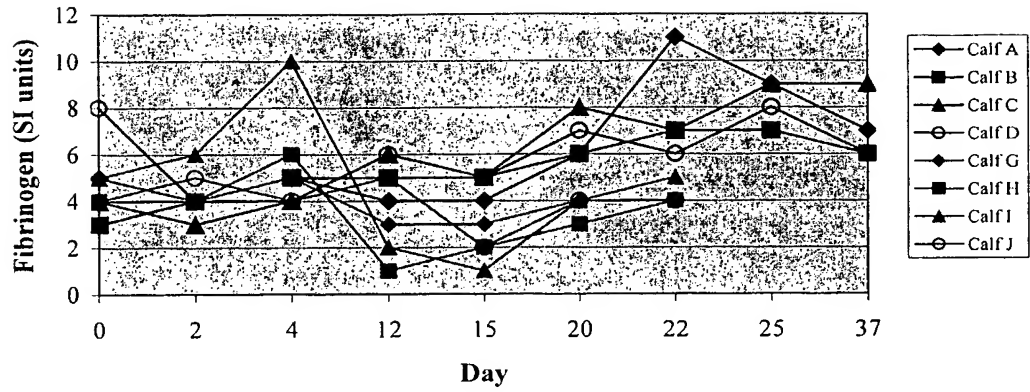
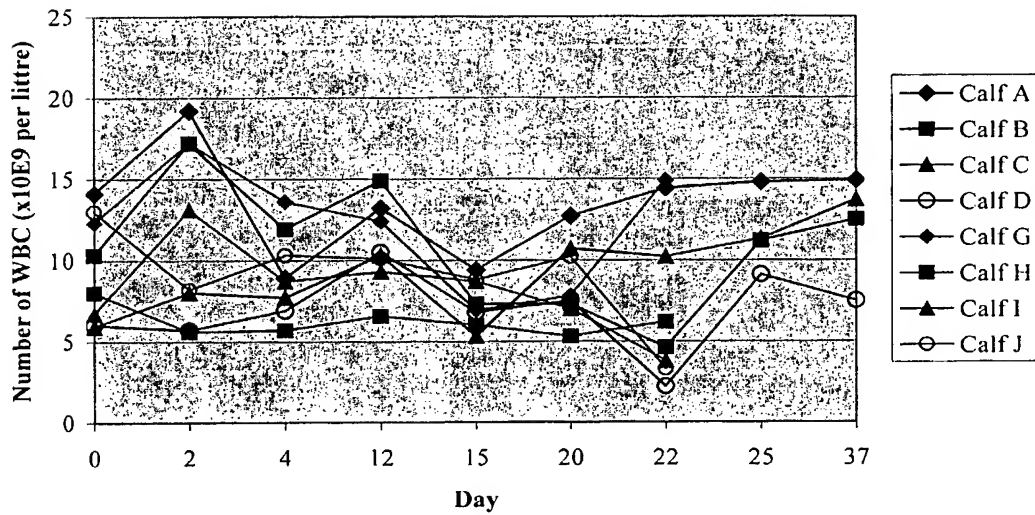
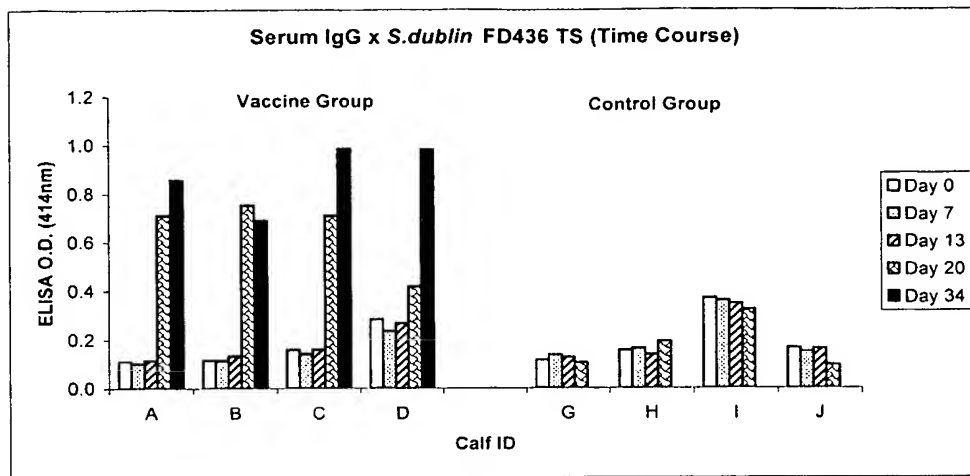


FIGURE 30

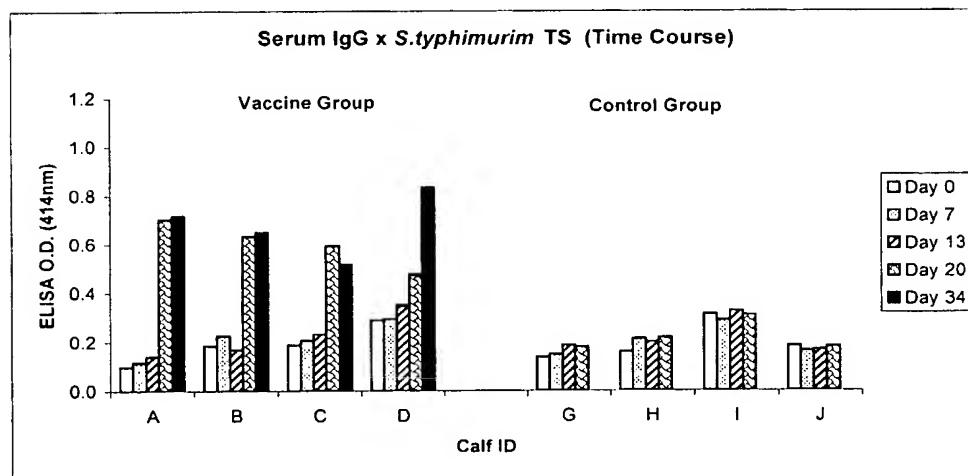


FUGURE 31



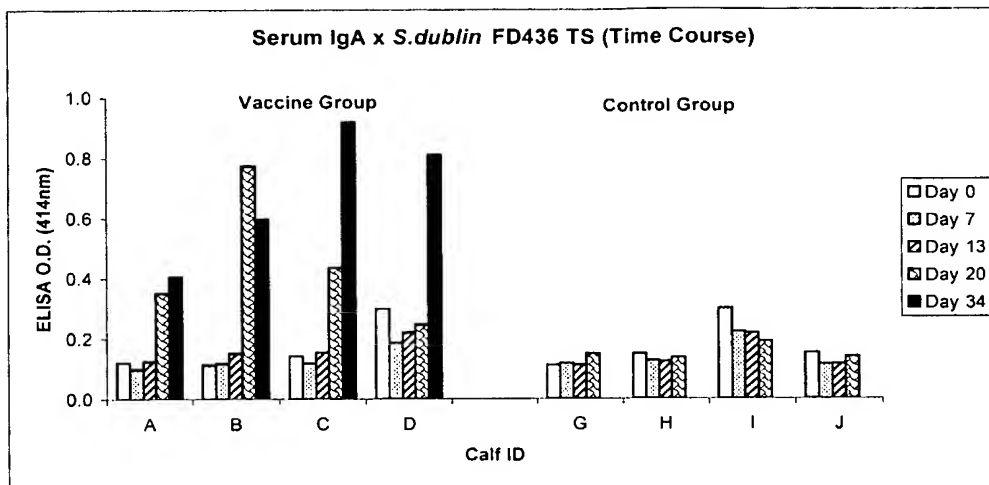
Day 0: 1st vaccination, Day 13: booster vaccination, Day 20: challenge infection with FD436.

FIGURE 32



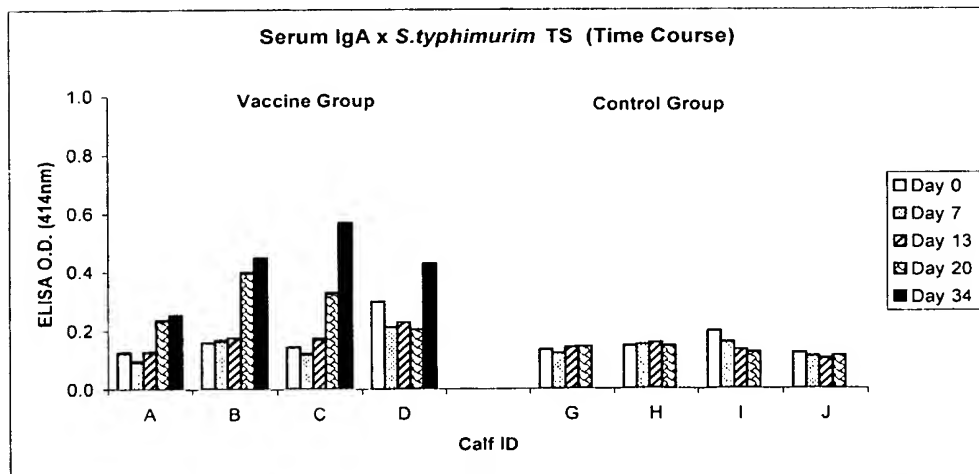
Day 0: 1st vaccination, Day 13: booster vaccination, Day 20: challenge infection with FD436.

FIGURE 33



Day 0: 1st vaccination, Day 13: booster vaccination, Day 20: challenge infection with FD436.

FIGURE 34



Day 0: 1st vaccination, Day 13: booster vaccination, Day 20: challenge infection with FD436.

FIGURE 35